RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/078,927BSource: 15/078,927BDate Processed by STIC: 15/078,927B

ENTERED



IFW16

```
RAW SEQUENCE LISTING
                                                              DATE: 06/22/2005
                                                               TIME: 17:07:57
                     PATENT APPLICATION: US/10/078,927B
                     Input Set : A:\SJ-01-0032 Revised 0305.ST25.txt
                     Output Set: N:\CRF4\06222005\J078927B.raw
      3 <110> APPLICANT: St. Jude Children's Research Hospital
              St. Jude Children's Research Hospital
      5
              Curran, Thomas
              Keshvara, Lakhu
      8 <120> TITLE OF INVENTION: Cyclin Dependent Kinase 5 Phosphorylation of Disabled 1
     10 <130> FILE REFERENCE: SJ-01-0032
     12 <140> CURRENT APPLICATION NUMBER: 10/078,927B
     13 <141> CURRENT FILING DATE: 2002-02-19
     15 <160> NUMBER OF SEQ ID NOS: 4
     17 <170> SOFTWARE: PatentIn version 3.2
     19 <210> SEQ ID NO: 1
     20 <211> LENGTH: 6
     21 <212> TYPE: PRT
     22 <213> ORGANISM: Mus musculus
     25 <220> FEATURE:
     26 <221> NAME/KEY: DOMAIN
     27 <222> LOCATION: (1)..(6)
     28 <223> OTHER INFORMATION: smallest carboxy terminal Dab1 tryptic fragment containing a
Cdk5
     29
              phosphorylation site
     31 <220> FEATURE:
     32 <221> NAME/KEY: SITE
     33 <222> LOCATION: (3)..(3)
     34 <223> OTHER INFORMATION: Serine at residue #3 equates to Serine491 in mouse Dab1
sequence
    35
              Cdk5 phosphorylation of Serine requires a Proline (P) in the +1
             position and a Lysine (K) in the +3 position
     38 <400> SEQUENCE: 1
     40 Gln Ser Ser Pro Ser Lys
     41 1
     44 <210> SEO ID NO: 2
     45 <211> LENGTH: 24
     46 <212> TYPE: PRT
     47 <213> ORGANISM: Mus musculus
     50 <220> FEATURE:
     51 <221> NAME/KEY: DOMAIN
    52 <222> LOCATION: (1)..(24)
     53 <223> OTHER INFORMATION: Dab1 tryptic fragment containing a Cdk5 phosphorylation site
    55 <220> FEATURE:
     56 <221> NAME/KEY: SITE
     57 <222> LOCATION: (21)..(21)
```

58 <223> OTHER INFORMATION: Serine at Reisdue 21 equates to Serine515 in mouse Dab1

sequence

```
Cdk5 phosphorylation of Serine requires a Proline (P) in the +1 position and a Lysine (K) in the +3 position
62 <400> SEQUENCE: 2
```

RAW SEQUENCE LISTING DATE: 06/22/2005 PATENT APPLICATION: US/10/078,927B TIME: 17:07:57

Input Set: A:\SJ-01-0032 Revised 0305.ST25.txt
Output Set: N:\CRF4\06222005\J078927B.raw

```
64 Ser Ser Ala Ser His Val Ser Asp Pro Thr Ala Asp Asp Ile Phe Glu
                   5
                                       10
68 Glu Gly Phe Glu Ser Pro Ser Lys
               20
69
72 <210> SEQ ID NO: 3
73 <211> LENGTH: 14
74 <212> TYPE: PRT
75 <213> ORGANISM: Mus musculus
78 <220> FEATURE:
79 <221> NAME/KEY: DOMAIN
80 <222> LOCATION: (1)..(14)
81 <223> OTHER INFORMATION: Dab1 phosphopeptide domain used for antibody production
83 <220> FEATURE:
84 <221> NAME/KEY: MOD RES
85 <222> LOCATION: (8)..(8)
86 <223> OTHER INFORMATION: PHOSPHORYLATION, equates to Serine491 in mouse Dab1 sequence
        Cdk5 phosphorylation of Serine requires a Proline (P) in the +1
87
        position and a Lysine (K) in the +3 position
88
90 <400> SEQUENCE: 3
92 Thr Pro Ala Pro Arg Gln Ser Ser Pro Ser Lys Ser Ser Ala
93 1
                   5
96 <210> SEQ ID NO: 4
97 <211> LENGTH: 555
98 <212> TYPE: PRT
99 <213> ORGANISM: Mus musculus
101 <400> SEQUENCE: 4
103 Met Ser Thr Glu Thr Glu Leu Gln Val Ala Val Lys Thr Ser Ala Lys
107 Lys Asp Ser Arg Lys Lys Gly Gln Asp Arg Ser Glu Ala Thr Leu Ile
               20
                                    25
111 Lys Arg Phe Lys Gly Glu Gly Val Arg Tyr Lys Ala Lys Leu Ile Gly
115 Ile Asp Glu Val Ser Ala Ala Arg Gly Asp Lys Leu Cys Gln Asp Ser
119 Met Met Lys Leu Lys Gly Val Val Ala Gly Ala Arg Ser Lys Gly Glu
123 His Lys Gln Lys Ile Phe Leu Thr Ile Ser Phe Gly Gly Ile Lys Ile
                                        90
127 Phe Asp Glu Lys Thr Gly Ala Leu Gln His His His Ala Val His Glu
                                    105
131 Ile Ser Tyr Ile Ala Lys Asp Ile Thr Asp His Arg Ala Phe Gly Tyr
                                120
135 Val Cys Gly Lys Glu Gly Asn His Arg Phe Val Ala Ile Lys Thr Ala
                            135
                                                140
139 Gln Ala Ala Glu Pro Val Ile Leu Asp Leu Arg Asp Leu Phe Gln Leu
143 Ile Tyr Glu Leu Lys Gln Arg Glu Glu Leu Glu Lys Lys Ala Gln Lys
                                        170
```

147 Asp Lys Gln Cys Glu Gln Ala Val Tyr Gln Thr Ile Leu Glu Glu Asp

RAW SEQUENCE LISTING DATE: 06/22/2005
PATENT APPLICATION: US/10/078,927B TIME: 17:07:57

Input Set: A:\SJ-01-0032 Revised 0305.ST25.txt
Output Set: N:\CRF4\06222005\J078927B.raw

148				180					185					190		
151	Val	Glu	Asp	Pro	Val	Tyr	Gln	Tyr	Ile	Val	Phe	Glu	Ala	Gly	His	Glu
152			195					200					205			
155	Pro	Ile	Arg	Asp	Pro	Glu	Thr	Glu	Glu	Asn	Ile	Tyr	Gln	Val	Pro	Thr
156		210					215					220				
159	Ser	Gln	Lys	Lys	Glu	Gly	Val	Tyr	Asp	Val	Pro	Lys	Ser	Gln	Pro	Val
160	225					230					235					240
163	Ser	Ala	Val	Thr	Gln	Leu	Glu	Leu	Phe	Gly	Asp	Met	Ser	Thr	Pro	Pro
164					245					250					255	
167	Asp	Ile	Thr	Ser	Pro	Pro	Thr	Pro	Ala	Thr	Pro	Gly	Asp	Ala	Phe	Leu
168				260					265					270		
171	Pro	Ser	Ser	Ser	${\tt Gln}$	Thr	Leu	Pro	Gly	Ser	Ala	Asp	Val	Phe	Gly	Ser
172			275					280					285			
175	Met	Ser	Phe	Gly	Thr	Ala	Ala	Val	Pro	Ser	Gly	Tyr	Val	Ala	Met	Gly
176		290					295					300				
179	Ala	Val	Leu	Pro	Ser	Phe	Trp	Gly	Gln	${\tt Gln}$	Pro	Leu	Val	Gln	Gln	${\tt Gln}$
180	305					310					315					320
183	Ile	Ala	Met	Gly	Ala	Gln	Pro	Pro	Val	Ala	Gln	Val	Ile	Pro	Gly	Ala
184					325					330					335	
187	Gln	Pro	Ile	Ala	Trp	Gly	Gln	${\tt Pro}$	Gly	Leu	Phe	Pro	Ala	Thr	Gln	Gln
188				340					345					350		
191	Ala	Trp	${\tt Pro}$	Thr	Val	Ala	Gly	Gln	Phe	Pro	Pro	Ala	Ala	Phe	Met	Pro
192			355					360					365			
195	Thr	Gln	Thr	Val	Met	Pro	Leu	Ala	Ala	Ala	Met	Phe	Gln	Gly	Pro	Leu
196		370					375					380				
199	Thr	Pro	Leu	Ala	Thr	Val	Pro	Gly	Thr	Asn	Asp	Ser	Ala	Arg	Ser	Ser
200						390					395					400
203	Pro	Gln	Ser	Asp	Lys	Pro	Arg	Gln	Lys	Met	Gly	Lys	Glu	Ser		Lys
204					405					410					415	
	Asp	Phe	Gln		Val	Gln	Pro	Pro		Val	Pro	Ser	Arg	Lys	Pro	Asp
208				420					425					430		
	Gln	Pro		Leu	Thr	Cys	Thr		Glu	Ala	Phe	Ser		Tyr	Phe	Asn
212			435			_		440					445			
	Lys		Gly	Val	Ala	Gln	_	Thr	Asp	Asp	Cys		Asp	Phe	Asp	Ile
216		450					455	_				460				
		Gln	Leu	Asn	Leu		Pro	Val	Thr	Ser		Thr	Pro	Ser	Thr	
220				_		470			_		475					480
	Ser	Pro	Pro	Thr		Ala	Pro	Arg	Gln		Ser	Pro	Ser	Lys		Ser
224	_			_	485		_			490		_	_		495	
	Ala	Ser	His		Ser	Asp	Pro	Thr		Asp	Asp	Ile	Phe	Glu	Glu	Gly
228				500					505		_			510		
	Phe	Glu		Pro	Ser	Lys	Ser		Glu	Gln	Glu	Ala		Asp	Gly	Ser
232	_		515					520	_	_	_		525			
	Gln		Ser	Ser	Thr	Ser	_	Pro	Phe	Gly	Glu		Ser	Gly	Glu	Pro
236	_	530		_		_	535	-	_		_	540				
		Gly	Asp	Asn	Ile	Ser	Pro	Gln	Asp	Gly						
240	545					550					555					

VERIFICATION SUMMARY

DATE: 06/22/2005

PATENT APPLICATION: US/10/078,927B

TIME: 17:07:58

Input Set : A:\SJ-01-0032 Revised 0305.ST25.txt

Output Set: N:\CRF4\06222005\J078927B.raw